

**REMARKS:**

Claims 47-48, 50-56, and 58-72 are currently pending in the application.

Claims 1-46, 49, 57, 67, 69, and 71 have been previously canceled without *prejudice*.

Claims 47, 55-56, 58-63, 65-66, and 70 are currently amended.

Claims 55, 56, 58-62 and 70 stand rejected under 35 U.S.C. § 112.

Claims 55, 56, 58-62, 70, and 72 stand rejected under 35 U.S.C. § 101.

Claims 47-48, 50-56, and 58-72 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,861,885 to Strasnick et al. (hereinafter “*Strasnick*”) in view of U.S. Patent No. 6,665,682 to DeKimpe et al. (hereinafter “*DeKimpe*”) and in further view of U.S. Patent No. 6,493,728 to Berger (hereinafter “*Berger*”).

Applicants respectfully submit that all of Applicants arguments and amendments are without *prejudice* or *disclaimer*. In addition, Applicants have merely discussed example distinctions from the cited prior art. Other distinctions may exist, and as such, Applicants reserve the right to discuss these additional distinctions in a future Response or on Appeal, if appropriate. Applicants further respectfully submit that by not responding to additional statements made by the Examiner, Applicant does not acquiesce to the Examiner's additional statements. The example distinctions discussed by Applicants are considered sufficient to overcome the Examiner's rejections. In addition, Applicants reserve the right to pursue broader claims in this Application or through a continuation patent application. No new matter has been added.

**I. REJECTION UNDER 35 U.S.C. § 112**

Claims 55, 56, 58-62 and 70 stand rejected under 35 U.S.C. § 112, first paragraph. Applicants respectfully submit that support for a “computer software product having a computer-readable memory” may be found at least in the following portions of the written description of the specification as filed:

This section describes the procedures that implement the preferred embodiment of the present invention. This invention comprises a generic GUI mechanism appropriate for many types of applications. An example structure for using the described method is shown in Figure 24, in which the described procedures are placed in a generic Graph System 100, driven by an Application 104 that has its own Database 106, whether *memory resident or on an external disk drive*. However, the invention is not limited to such an organization. The Graph System 100 could be implemented as non-generic software imbedded in the Application 102, for example. (Page 16, lines 13-21). (Emphasis Added).

Applicants respectfully submit that Claims 55, 56, 58-62 and 70 are considered to be in full compliance with the requirements of 35 U.S.C. § 112 and respectfully request that the rejection of Claims 55, 56, 58-62 and 70 under 35 U.S.C. § 112 be withdrawn.

## **II. REJECTION UNDER 35 U.S.C. § 101**

Claims 55, 56, 58-62, 70, and 72 stand rejected under 35 U.S.C. § 101.

Title 35 U.S.C. § 101 provides that patents may be obtained for “any new and useful process, machine, manufacture, or composition of matter.” Applicants have amended independent Claim 55 to recite a “*computer software product having a computer-readable memory with control logic stored therein that provides a computer graphical user interface*.” As such, Applicants respectfully submit that a “computer-readable memory,” as claimed in pending Claim 55 is, at a minimum, a manufacture.<sup>1</sup>

Furthermore, independent Claim 63 has been amended to reflect the specific machine that accomplishes the elements of the claimed method.

Therefore, Applicants respectfully submit that independent Claim 55 and 63 and dependent Claims 56-62, 65-66, 70, and 72 as amended, are directed to statutory subject matter. Thus, Applicants respectfully request that the rejection of Claims 55-56, 58-66, 70, and 72 under 35 U.S.C. § 101 be withdrawn.

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<sup>1</sup> To date, approximately 700,000 patents containing claims directed to computer-readable memory have been issued by the USPTO.

### III. REJECTION UNDER 35 U.S.C. § 103(a)

In rejecting Claims 47-48, 50-56, and 58-72 under 35 U.S.C. § 103(a) as anticipated by *Strasnick* in view of *DeKimpe* further in view of *Berger*, the Examiner states the following in asserting that *Strasnick* discloses “**a first wall graphical user interface grid associated with a mathematical summarization of the plurality of function values associated with each of the top layer hierarchies of the multidimensional axes data hierarchy, the first wall graphical user interface grid perpendicular with the first axis dimension**” as required by Claim 47:

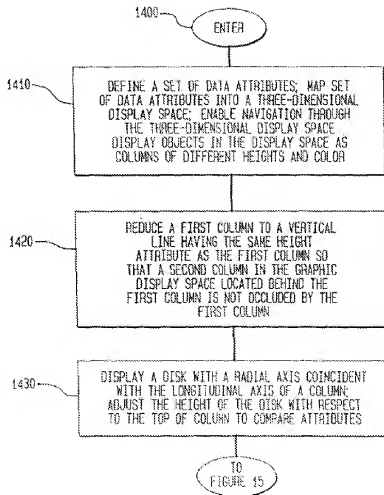
a first wall graphical user interface grid associated with a mathematical summarization of the plurality of function values associated with each of the top layer hierarchies of the multidimensional axes data hierarchy, the first wall graphical user interface grid perpendicular with the first axis dimension (The z-axis dimension is associated with the filter levels and heights that are selectable data objects/blocks and therefore the value hierarchies are associated with the selectable data objects/blocks wherein the top filter level represents the top layer hierarchy for the third dimension. *Strasnick* discloses in Fig. 10B, 11 and column 22 value hierarchies in a 3D space wherein the value hierarchies are arranged in layers including front wall/layer graphical user interface grid in front of other layers. *Strasnick* further teaches a summarization layer graphical user interface grid to summarize the value hierarchies. The values are represented in different heights and colors to indicate the attributes of the data and the values may be summarized in a three-dimensional graph display----the summarization provides a summarized graphical user interface level for the function values associated with each of the top layer hierarchies of the multi-dimensional axes data hierarchy. See Fig. 11 wherein the data value hierarchies are associated with the three dimensional graph having the first dimension axis---- sales by regions or employee organizations, the second dimension axis----year/quarter/months and the third dimension axis--- product items arranged in the value hierarchies wherein the value hierarchies are arranged in terms of the product items and the product items are further divided into the product item quota, the product item sale represented by the heights and colors. *Strasnick* clearly teaches that the sales and quota of product items are represented by the height and color and thereby value hierarchies is taught by *Strasnick*);

(10 April 2009 Final Office Action, Pages 21-22). Applicants respectfully disagree with all of the above and respectfully submit that *Strasnick* fails to disclose at least a “**first wall graphical user interface grid associated with a mathematical summarization of the plurality of function values associated with each of the top layer hierarchies** of the multi-dimensional axes data hierarchy, the

*first wall graphical user interface grid perpendicular with the first axis dimension” as required by Applicants’ independent Claim 47.*

Applicants respectfully direct the Examiner’s attention to Figure 14 and column 22, lines 21-36, provided below, upon which the Examiner relies:

**FIG. 14**



Turning now to FIG. 14, a sequence of preferred operations for a preferred embodiment is illustrated. The present invention is invoked via entry point 1400. In block 1410 the present invention defines a set of data attributes; maps the set of data attributes into a three-dimensional display space; enables navigation through the three-dimensional display space and displays objects in the display space as columns of different heights and colors. In block 1420 the present invention reduces a first

column to a vertical line having the same height attribute as the first column so that a second column in the graphic display space located behind the first column is not occluded by the first column. In block 1430 the present invention displays a disk with a radial axis coincident with the longitudinal axis of a column; and adjusts the height of the disk with respect to the top of the column to indicate a comparison between attributes.

Applicants respectfully submit that nowhere does the portion of *Strasnick* relied upon by the Examiner disclose at least a “***first wall graphical user interface grid associated with a mathematical summarization of the plurality of function values associated with each of the top layer hierarchies*** of the multi-dimensional axes data hierarchy, ***the first wall graphical user interface grid perpendicular with the first axis dimension.***” By contrast, the cited portion of *Strasnick* merely discloses, among other things, a navigable three-dimensional display space in which graphical elements may be displayed. Applicants respectfully submit that the navigable three-dimensional display space disclosed in *Strasnick* does not equate to a “***first wall graphical user interface grid associated with a mathematical summarization of the plurality of function values associated with each of the top layer hierarchies*** of the multi-dimensional axes data hierarchy, ***the first wall graphical user interface grid perpendicular with the first axis dimension***” as required by Claim 47.

Furthermore, Applicants respectfully direct the Examiner’s attention to the remaining portions of *Strasnick* that the Examiner relies upon for disclosure of this limitation, namely, Figures 10B and 11 and the corresponding description of those figures at column 20, lines 58-61 of the specification of *Strasnick*, provided below:

FIG. 10B

FIELD	SORT	ATTRIBUTE	TYPE
ORG.	1	PARENT OF	TEXT
AREA	2	PARENT OF	TEXT
REGION	3	PARENT OF	TEXT
BRANCH	4	PARENT OF	TEXT
SALES_REP	5	LEAF NODE	TEXT
GADGET_UNITS	1	BLOCK DISPLAY	\$K
GADGET_SALES	1	BLOCK HEIGHT	INT
GADGET_QUOTA	1	BLOCK COLOR	\$K
WIDGET_UNITS	2	BLOCK DISPLAY	\$K
WIDGET_SALES	2	BLOCK HEIGHT	INT
WIDGET_QUOTA	2	BLOCK COLOR	\$K
GIZMO_UNITS	3	BLOCK DISPLAY	\$K
GIZMO_SALES	3	BLOCK HEIGHT	INT
GIZMO_QUOTA	3	BLOCK COLOR	\$K
DOHICKEY_UNITS	4	BLOCK DISPLAY	\$K
DOHICKEY_SALES	4	BLOCK HEIGHT	INT
DOHICKEY_QUOTA	4	BLOCK COLOR	\$K

FIG. 11

BRANCH	REP	GADGET UNITS	GADGET SALES	GADGET QUOTA	WIDGET UNITS	WIDGET SALES	WIDGET QUOTA
BALTIMORE	SEIKO	22	197	40	0	0	0
BALTIMORE	DAVID	190	714	165	11	260	225
BALTIMORE	HEYMAN	0	29	340	0	0	0
BOSTON	GILLIGAN	23	141	540	0	0	0
BOSTON	CHEVAL	1	4	280	0	0	0
BOSTON	MAURICE	4	14	45	0	0	0
BOSTON	GILLIGAN	54	260	915	4	95	275
BOSTON	PHILLIPPE	0	0	0	32	1120	0
HARTFORD	SONIA	53	254	25	7	154	2075
HARTFORD	JEFF	49	226	105	11	258	300
NEW YORK	SHARON	0	0	0	13	304	325
NEW YORK	CHEVAL	0	0	0	5	147	50
NEW YORK	SONIA	127	514	496	16	371	775
NEW YORK	SONIA	9	43	505	0	0	0
NEW YORK	GARIELA	52	252	5	0	0	0
NEW YORK	CARLA	0	0	0	1	25	500
PHILADEL	GREG	103	753	380	0	0	0
PHILADEL	JULIE	0	24	820	27	1052	50
PHILADEL	MARY	0	0	0	0	0	0
PHILADEL	ALAN	19	91	26	4	95	725
WASHINGTON	NORM	0	44	0	0	0	0
WASHINGTON	TORRE	40	195	180	0	0	0
WASHINGTON	PABLO	29	142	365	40	882	0
WASHINGTON	SUEVE	95	443	490	13	303	375
WASHINGTON	ROSEY	79	313	375	0	0	0
HOUSTON	DAVIDES	0	0	0	0	0	0
HOUSTON	LEIGH	59	278	110	12	290	0
HOUSTON	BARBARA	0	0	0	3	70	125
MIAMI	DAVE	13	63	105	0	0	0

FIG. 10B illustrates a tabular representation of displayed data as sorted by type and attribute. FIG. 11 illustrates a tabular representation of data values represented in display space.

Applicants respectfully disagree with the Examiner's interpretation of Figures 10B and 11 of *Strasnick* as disclosing a “*first wall graphical user interface grid associated with a mathematical summarization of the plurality of function values associated with each of the top layer hierarchies* of the multi-dimensional axes data hierarchy, *the first wall graphical user interface grid perpendicular with the first axis dimension.*” Rather, the assignment of a color or height to a field as depicted in Figure 10B of *Strasnick* merely represents the assignment of an additional attribute, not a “*mathematical summarization of the plurality of function values associated with each of the top layer hierarchies.*” Nowhere does the portion of *Strasnick* on which the Examiner relies disclose any mathematical summarization being performed in conjunction with the assignment of color or height attributes to particular display elements. Thus, *Strasnick* is silent, and therefore fails to disclose at least the limitation of Applicants' Claim 47 of a “*first wall graphical user interface grid associated with a mathematical summarization of the plurality of function values associated with each of the top layer hierarchies* of the multi-dimensional axes data hierarchy, *the first wall graphical user interface grid perpendicular with the first axis dimension.*”

Applicants further respectfully submit that neither *DeKimpe* nor *Berger*, taken individually or in combination, supply the missing teachings. Thus, Applicants respectfully submit that the Office Action fails to establish a *prima facie* case of obviousness of Claim 47 under 35 U.S.C. § 103(a) with respect to *Strasnick*, *DeKimpe* and *Berger* because *Strasnick*, *DeKimpe* and *Berger* fail to expressly or inherently describe a “*first wall graphical user interface grid,*” as claimed in Claim 47. Accordingly, Applicants respectfully request that the rejection of Claims 47-48, 50-56, and 58-72 under 35 U.S.C. § 103(a) be withdrawn.

IV. **Office Action Fails to Properly Establish a Prima Facie case of Obviousness over the Proposed Strasnack - DeKimpe - Berger Combination According to the UPSTO Examination Guidelines**

Applicants respectfully submit that the Office Action fails to properly establish a *prima facie* case of obviousness based on the proposed combination of *Strasnack*, *DeKimpe*, or *Berger*, either individually or in combination, and in particular, the Office Action fails to establish a *prima facie* case of obviousness based on the “Examination Guidelines for Determining Obviousness Under 35 U.S.C. § 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*” (the “Guidelines”).

As reiterated by the Supreme Court in *KSR International Co. v. Teleflex Inc.* (*KSR*), the framework for the objective analysis for determining obviousness under 35 U.S.C. § 103 is stated in *Graham v. John Deere Co.* (383 U.S. 1, 148 USPQ 459 (1966)). Obviousness is a question of law based on underlying factual inquiries. These factual inquiries enunciated by the Court are as follows:

- (1) Determining the scope and content of the prior art;
- (2) Ascertaining the differences between the claimed invention and the prior art; and
- (3) Resolving the level of ordinary skill in the pertinent art.

(Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). Objective evidence relevant to the issue of obviousness must be evaluated by Office personnel. (383 U.S. 17–18, 148 USPQ 467 (1966)). As stated by the Supreme Court in *KSR*, “While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.” (*KSR*, 550 U.S. at \_\_, 82 USPQ2d at 1391).

However, it is important to note that the Guidelines require that Office personnel “**ensure that the written record includes findings of fact** concerning the state of the art and the teachings of the references applied. (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). In addition, the Guidelines remind Office personnel that the “**factual findings made by Office personnel are the necessary underpinnings to establish obviousness.**” (*id.*). Further, “**Office personnel must provide an explanation to support an obviousness rejection** under 35 U.S.C. 103. (*id.*). In fact, “35 U.S.C. 132 requires that the applicant be notified of the reasons for the rejection of the claim so that he or



she can decide how best to proceed” and “clearly setting forth findings of fact and the rationale(s) to support a rejection in an Office action leads to the prompt resolution of issues pertinent to patentability.” (*id.*).

With respect to the subject application, the Office Action has not shown the ***factual findings necessary to establish obviousness*** or even ***an explanation to support the obviousness rejection*** based on the proposed combination of *Strasnick*, *DeKimpe*, and *Berger*. The Office Action merely states that “it would have been obvious to one of the ordinary skill in the art at the time of invention was made to incorporate *DeKimpe* or *Berger*’s multi-dimensional user graphical interface.” (10 April 2009 Final Office Action, Page 36). Applicants respectfully disagree and respectfully submit that the Examiner’s conclusory statement is not sufficient to establish the ***factual findings necessary to establish obviousness*** and is not a sufficient ***explanation to support the obviousness rejection*** based on the proposed combination of *Strasnick*, *DeKimpe*, and *Berger*.

The Guidelines further provide guidance to Office personnel in “determining the scope and content of the prior art” such as, for example, “Office personnel must first obtain a thorough understanding of the invention disclosed and claimed in the application.” (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). The scope of the claimed invention must be clearly determined by giving the claims the “broadest reasonable interpretation consistent with the specification.” (See *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) and MPEP § 2111.). In addition, the Guidelines state that any “***obviousness rejection should include***, either explicitly or implicitly in view of the prior art applied, ***an indication of the level of ordinary skill.***” (Notice, 72 Fed. Reg. 57528 (Oct. 10, 2007)). With respect to the subject Application, the Office Action has not provided ***an indication of the level of ordinary skill.***

The Guidelines still further provide that once the *Graham* factual inquiries are resolved, Office personnel must determine whether the claimed invention would have been obvious to one of ordinary skill in the art. (*Id.*). For example, the Guidelines state that ***Office personnel must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art.*** (*Id.*). In addition, the Guidelines state that the proper analysis is ***whether the claimed invention would have been obvious to one of ordinary skill in the art after consideration of all the facts.*** (*Id.* and See 35 U.S.C. 103(a)).

With respect to the subject Application, the Office Action has not expressly resolved any of the *Graham* factual inquiries to determine whether Applicants invention would have been obvious to one of ordinary skill in the art. In addition, the Office Action fails to *explain why the difference(s) between the proposed combination of Strasnick, DeKimpe, Berger, and Applicants' claimed invention would have been obvious to one of ordinary skill in the art.* The Office Action merely states that "because *Strasnick's* multi-dimensional data hierarchy and drilling up and down the hierarchical structure and thus suggests drilling up and down multi-dimensional hierarchies including the three-dimensional layout of the hierarchical structures of displayed objects." (10 April 2009 Final Office Action, Page 36). Applicants respectfully disagree and further respectfully request clarification as to how this statement *explains why the difference(s) between the proposed combination of Strasnick, DeKimpe, Berger, and Applicants' claimed invention would have been obvious to one of ordinary skill in the art.* Applicants further respectfully submit that the Examiner is using the subject Application as a template to formulate reconstructive hindsight, which constitutes impermissible use of hindsight under 35 U.S.C. § 103(a).

The Guidelines yet further state that the "key to supporting any rejection under 35 U.S.C. § 103 is the *clear articulation of the reason(s) why the claimed invention would have been obvious.*" (Notice, 72 Fed. Reg. 57528 (Oct. 10, 2007)). In fact, the Supreme Court in *KSR* noted that "*the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.*" (*id.*). The Court quoting *In re Kahn* (441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)), stated that "[R]ejections on *obviousness cannot be sustained by mere conclusory statements*; instead, there *must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.*" (*KSR*, 550 U.S. at \_\_, 82 USPQ2d at 1396). The Guidelines provide the following seven rationales:

- (A) Combining prior art elements according to known methods to yield predictable results;
- (B) Simple substitution of one known element for another to obtain predictable results;
- (C) Use of known technique to improve similar devices (methods, or products) in the same way;
- (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- (E) "Obvious to try"—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;

- (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art;
- (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

Applicants respectfully submit that the *Office Action fails to provide any articulation, let alone, clear articulation of the reasons why the Applicants claimed invention would have been obvious*. For example, the *Examiner has not adequately supported the selection and combination of Strasnick, DeKimpe, and Berger to render obvious Applicants' claimed invention*. The Examiner's unsupported conclusory statements that "it would have been obvious to one of the ordinary skill in the art at the time of invention was made to incorporate *DeKimpe* or *Berger*'s multi-dimensional user graphical interface" and "because *Strasnick*'s multi-dimensional data hierarchy and drilling up and down the hierarchical structure and thus suggests drilling up and down multi-dimensional hierarchies including the three-dimensional layout of the hierarchical structures of displayed objects," *does not adequately provide clear articulation of the reasons why the Applicants claimed invention would have been obvious*. (10 April 2009 Final Office Action, Page 36). In addition, the Examiner's unsupported conclusory statement fails to meet any of the Guidelines rationales to render obvious the Applicants claimed invention.

Thus, if the Examiner continues to maintain the obvious rejection based on the proposed combination of *Strasnick*, *DeKimpe*, and *Berger*, *Applicants respectfully request that the Examiner provide proper support for the obviousness rejection under 35 U.S.C. § 103 as necessitated by the Guidelines, including an explicit analysis of the rationale relied upon by the Examiner*.

**V. Applicants' Claims are Patentable over the Proposed *Strasnick- DeKimpe- Berger Combination***

Applicants respectfully submit that independent Claims 55 and 63 are considered patentably distinguishable over the proposed combination of *Strasnick*, *DeKimpe*, or *Berger* for at least the reasons discussed above in connection with independent Claim 47.

With respect to dependent Claims 48, 50-54, 56, 58-62, and 64-72: Claims 48, 50-54, 67, and 68 depend from independent Claim 47; Claims 56, 58-62, 69, and 70 depend from independent Claim 55; and Claims 64-66, 71, and 72 depend from independent Claim 63. As mentioned above, each of independent Claims 55 and 63 include limitations similar to those discussed above in connection with independent Claim 47. Thus, dependent Claims 48, 50-54, 56, 58-62, and 64-72 are considered patentably distinguishable over the proposed combination of *Strasnick*, *DeKimpe*, or *Berger* for at least the reasons of depending from an allowable claim and are therefore considered to be in condition for allowance.

For at least the reasons set forth herein, the Applicants respectfully submit that Claims 47, 48, 50-56, and 58-72 are not rendered obvious by the proposed combination of *Strasnick*, *DeKimpe*, or *Berger*, or in knowledge generally available to those of ordinary skill in the art at the time of the invention, and are in condition for allowance. Thus, Applicants respectfully request that the rejection of Claims 47, 48, 50-56, and 58-72 under 35 U.S.C. § 103(a) be reconsidered and that Claims 47, 48, 50-56, and 58-72 be allowed.

**CONCLUSION:**

In view of the foregoing remarks, this application is considered to be in condition for allowance, and early reconsideration and a Notice of Allowance are earnestly solicited.

Although Applicants believe no fees are deemed to be necessary; the undersigned hereby authorizes the Director to charge any additional fees which may be required, or credit any overpayments, to **Deposit Account No. 500777**. If an extension of time is necessary for allowing this Response to be timely filed, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) to the extent necessary. Any fee required for such Petition for Extension of Time should be charged to **Deposit Account No. 500777**.

**Please link this application to Customer No. 53184 so that its status may be checked via the PAIR System.**

Respectfully submitted,

10 June 2009

Date

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